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Notice of Allowability	Application No.	Applicant(s)	
	09/683,231	BENAYOUN ET AL.	
	Examiner	Art Unit	
	Afsar M. Qureshi	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment received, by e-mail, dated 8/8/2005.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ The drawings filed on 12 November 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☒ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


AFSAR QURESHI 8/8/05
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Lestrage on August 8, 2005.

1. The application has been amended as follows:

IN THE CLAIMS:

Claims 1, 8, 9, 10 and 12 have been amended as requested.

Please see the attached amended print outs from Applicant.

The following is an examiner's statement of reasons for allowance:

The closest prior art, YU, US 6,501,734 fails to disclose unique method of "routing ATM bases data packets to an ultimate destination node without modification of the packet header with first and second memory integral to first receiver, first and second output wherein second output is used to output a second subset of the first plurality of data packets", as in claims

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

1. (Currently Amended) A switching module to route ATM based data packets to an ultimate destination node without modification of a packet header, comprising:

a first receiver which stores a first plurality of data packets in a first memory or a second memory integral to the first receiver;

a second receiver which stores a second plurality of data packets in a first memory or a second memory integral to the second receiver;

a first output which outputs a first subset of the first plurality of data packets and the second plurality of data packets;

a second output which outputs a second subset of the first plurality of data packets; and

a switch coupled to the first receiver and the second receiver and coupled to the first output and the second output for routing the first subset and the second subset to the respective first or second output.

8. (Currently Amended) A switching structure to route ATM based data packets to an ultimate destination node without modification of a packet header, comprising:

two switching modules wherein the first and second switching modules include:

a first receiver which stores a first plurality of data packets, in a first memory or a second memory integral to the first receiver;

a second receiver which stores a second plurality of data packets, in a first memory or a second memory integral to the second receiver;

a first output which outputs a first subset of the first plurality of data packets and the second plurality of data packets;

a second output which outputs a second subset of the first plurality of data packets; and

a switch coupled to the first receiver and the second receiver and coupled to the first output and the second output for routing the first subset and the second subset to the respective first or second output, and wherein a first expansion data-out circuit of the first switching module is connected to a first expansion data-in circuit of the second switching module, and a first expansion data-out circuit of the second switching module is connected to a first expansion data-in circuit of the first switching module.

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9. (Currently Amended) A switching structure to route ATM based data packets to an ultimate destination node without modification of a packet header, comprising:

two switching modules wherein the first and second switching modules include:

a first receiver having an integral memory which stores a first plurality of data packets, the first receiver being cross-connected to form a single receiver;

a second receiver having an integral memory which stores a second plurality of data packets;

a first output which outputs a first subset of the first plurality of data packets and the second plurality of data packets, the first output being cross-connected to form a single output;

a second output which outputs a second subset of the first plurality of data packets; and

a switch coupled to the first receiver and the second receiver and coupled to the first output and the second output for routing the first subset and the second subset to the respective first or second output, and wherein a first expansion data-out circuit of the first switching module is connected to a first expansion data-in circuit of the second switching module, and a first expansion data-out circuit of the second switching module is connected to a first expansion data-in circuit of the first switching module.

10. (Currently Amended) A data transmission system to route ATM based data packets to an ultimate destination node without modification of a packet header, comprising:

a plurality of Local Area Networks interconnected by a hub including a plurality of LAN adapters respectively connected to said LANs and a crossbar switch interconnecting all LAN adapters wherein at least one of said LANs transmits a plurality of data packets to another one of said LANs through said crossbar switch, and wherein said crossbar switch comprises at least two switching modules, said switching modules comprising:

a first receiver which stores a first plurality of data packets in a first memory or a second memory integral to the first receiver;

a second receiver which stores a second plurality of data packets in a first memory or a second memory integral to the second receiver;

a first output which outputs a first subset of the first plurality of data packets and the second plurality of data packets;

a second output which outputs a second subset of the first plurality of data

packets; and

a switch coupled to the first receiver and the second receiver and coupled to the first output and the second output for routing the first subset and the second subset to the respective first or second output.

12. (Currently Amended) A method for routing a plurality of data packets to an ultimate destination node without modification of a packet header in a data transmission system having a plurality of Local Area Networks interconnected by a hub including a plurality of LAN adapters respectively connected to said LANs and a crossbar switch comprising at least two switching modules wherein the first and second switching modules comprise a first receiver which stores a first plurality of data packets in a first memory or a second memory integral to the first receiver, a second receiver which stores a second plurality of data packets in a first memory or a second memory integral to the second receiver, a first output which outputs a first subset of the first plurality of data packets and the second plurality of data packets, a second output which outputs a second subset of the first plurality of data packets, and a switch coupled to the first receiver and the second receiver and coupled to the first output and the second output for routing the first subset and the second subset to the respective first or second output, the crossbar switch interconnecting all LAN adapters and wherein at least one of said LANs transmits a plurality of data packets to another one of said LANs through said crossbar switch, each of said data packets having a fixed bytes size with one byte containing the respective final destination address, the method comprising the steps of:

receiving the plurality of data packets within the first switching module;

comparing the final destination address of each of said data packets to a switch module address range of the first switching module; and

storing the corresponding data packet into an internal memory of the first switching module for further outputting to the appropriate LAN adapter if the final destination address matches, or storing the corresponding data packet in an expansion memory of the first switching module for further routing to the second switching module.


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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afsar M. Qureshi whose telephone number is (571) 272 3178.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272 3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


AFSAR QURESHI
PRIMARY EXAMINER

August 8, 2005